



As a below named inventor, I hereby declare that:

This	dec	laration	is	of	the	fol	low	ing	tyĮ	e:

[X] original
[] divisional
[] continuation
[] continuation-in-part

### INVENTORSHIP IDENTIFICATION

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

## TITLE OF INVENTION

PULSE NUCLEATION ENHANCED NUCLEATION TECHNIQUE FOR IMPROVED STEP COVERAGE AND BETTER GAP FILL FOR WCVD PROCESS

## SPECIFICATION IDENTIFICATION

The specification of which:

[ ]	is attached hereto
[ X ]	was filed on December 17, 2001, under Serial No. 10/023,125, executed on even date herewith; of
[ ] Expr	ress Mail No. @(as Serial No. not yet known)
	and was amended on (if applicable)
[]	was described and claimed in PCT International Application No.
filed on	and as amended under PCT Article 19 on

## ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

[ ] In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.

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least one country other than the United States of America listed below, and have also identified below any foreign
application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one
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that of the application(s) of which priority is claimed.

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	[]	No su	ch applications have	e been filed.				
	[X]	Such a	applications have be	en filed as folle	ows:			
A.			PCT application(s) ity claims under 35		12 mos. (6 m	os. for desig	n) prior to this	application
Coun	try/PCT		Application N	<u> 10</u>	Date Filed		Priority Clain	<u>ned</u>
							[ ] Yes [ ] [ ] Yes [ ] [ ] Yes [ ]	No No No
В.		eign app pplication	plication(s), if any, on	filed more tha	an 12 mos. (6	o mos for des	ign) prior to thi	is
	Countr Applic Filing	ation No	:					
C.	US Pro	ovisional	applications filed	within 12 mon	ths prior to t	this U.S. App	plication	
			: 60/305,307 aly 13, 2001					
			PRIO	RITY CLAIM	(35 U.S.C. §	§1 <b>2</b> 0)		
internat subject manner informa likelihoo issue as	ional ap matter of provide ation that od that as a pater	plication of each of d by the is mate is reasona nt) which	fit under Title 35, Use designating the of the claims of the first paragraph of Trial to the examinate ble Examiner would occurred between of this application.	United States of application is application in Title 35, United ion of this application of the consider it in	of America the not disclosed States Code, lication (name apportant in de	nat is/are listed in that/those, §112, I ackrely, informatically	ed below and, in se prior applicate nowledge the dut- tion where there er to allow the a	nsofar as the tion(s) in the ty to disclose is substantial application to
	[X]		h applications have pplications have bee		ows:			
						Status		
	Serial 1	Vo.	Filing Date	Datent	ed Pending	Ahand	oned	

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa Donald Verplancken Lawrence Edelman Michael B. Einschlag Raymond Kam-On Kwong James C. Wilson Joseph Bach Robert W. Mulcahy Walter Benjamin Glenn B. Todd Patterson William B. Patterson Raymond R. Moser, Jr. Keith M. Tackett	Registration No. 25,610 Registration No. 33,217 Registration No. 25,226 Registration No. 29,301 Registration No. 37,165 Registration No. 35,412 Registration No. 37,771 Registration No. 25,436 Registration No. 44,713 Registration No. 37,906 Registration No. 34,102 Registration No. 36,682 Registration No. 36,682
Raymond R. Moser, Jr. Keith M. Tackett	Registration No. 36,682 Registration No. 32,008
Joseph Pagnotta	Registration No. 39,322

Send correspondence to:

Direct telephone calls to:

Patent Counsel, MS/2061 Legal Affairs Dept. Applied Materials, Inc.

**Todd Patterson** 

P. O. Box 450A Santa Clara, CA 95052. MOSER PATTERSON & SHERIDAN, LLP (713) 623-4844

## **DECLARATION**

Full name of first inver	ntor: Jong Hyun Yoo	
Inventor's signature:		Date:
Residence:	Milpitas, California	
Post Office Address:	190 Rainbow Place	
	Milpitas, California 95035	
	U.S.A.	Country of Citizenship: South Korea
Full name of second in	ventor: Xinliang Lu	11 56-2007
Inventor's signature:	XVIII	Date: 4-25-2002
Residence:	Sunnyvale, California	·
Post Office Address:	685 Garland Avenue #54	
	Sunnyvale, California 94086	
	U.S.A.	Country of Citizenship: People's Republic of China

Country of Citizenship: Republic of China (Taiwan)

Full name of third inve	entor: Chiliang Chen	·
Inventor's signature:		Date:
Residence: Post Office Address:	Sunnyvale, California 1712 Calary Drive Sunnyvale, California 94538 U.S.A.	Country of Citizenship: Republic of China (Taiwan)
Full name of fourth inv	ventor: Kevin Kaung Lai	
Inventor's signature:	) (" ) (" ) (" ) (" ) (" ) (" ) (" ) ("	Date:
Residence: Post Office Address:	Milpitas, California 1354 Terra Alta Drive	
rost Office Address.	Milpitas, California 95035 U.S.A.	Country of Citizenship: Republic of China (Taiwan)
Full name of fifth inver	2.0	Country of Citizenship. Republic of China (Taiwan)
Inventor's signature:		Date:
Residence:	Sunnyvale, California	
Post Office Address:	725 Starbush Drive	
	Sunnyvale, California 94086	

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U.S.A.



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	[]	No suc	ch applications have be	en filed.					
	[X]	Such a	pplications have been	filed as follows:					
Α.	Prior and a	foreign/I ny priorit	PCT application(s) fi ty claims under 35 U	led within 12 mo .S.C. §119	os. (6 ma	os. for desig	gn) prior to	this	application
Cour	ntry/PCT	·	Application No	<u>D</u> a	ite Filed		Priority	Claim	<u>ed</u>
							[ ] Yes [ ] Yes [ ] Yes	[]	No No No
В.		reign app application	lication(s), if any, filen	ed more than 12	mos. (6	mos for des	sign) prior	t <b>o this</b>	3
	Countr Applic Filing	ation No:							
C.	US Pr	ovisional	applications filed wit	hin 12 months p	rior to tl	his U.S. Ap	plication		
			60/305,307 y 13, 2001						
			PRIORIT	ΓΥ CLAIM (35 I	U <b>.S.C.</b> §1	120)			
nterna subject nanner nforma ikeliho ssue a	tional ap matter of provide ation that abod that a as a pater	oplication(sof each of	it under Title 35, Unit s) designating the Un f the claims of this a first paragraph of Title ial to the examination ble Examiner would co occurred between th f this application.	ited States of An pplication is not a 35, United State of this applicationsider it importa	nerica that disclosed es Code, on (namel ant in dec	at is/are list in that/tho §112, I ack ly, informati ciding wheth	ed below a se prior ap nowledge the ion where the to allow	nd, in plication of the plication of the plant of the appropriate the appropriate of the	sofar as the on(s) in the control of
	[X]		applications have bee plications have been f						
						_Status			
	Serial 1	<u>No</u> .	Filing Date	Patented Per	nding	Aband	loned	_	

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Applied Materials, Inc.

MOSER PATTERSON & SHERIDAN, LLP

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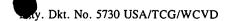
Santa Clara, CA 95052.

## **DECLARATION**

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Inventor's signature:		Date:
Residence:	Milpitas, California	•
Post Office Address:	190 Rainbow Place	
	Milpitas, California 95035	
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Full name of second in	ventor: Xinliang Lu	
Inventor's signature:		Date:
Residence:	Sunnyvale, California	
Post Office Address:	685 Garland Avenue #54	
	Sunnyvale, California 94086	
	U.S.A.	Country of Citizenship: People's Republic of China

Full name of third inve	entor: Chiliang Chan	
Inventor's signature: Residence: Post Office Address:	Sunnyvale, California 1712 Calary Drive Sunnyvale, California 94538	Date: $4/23/02$
	U.S.A.	Country of Citizenship: Republic of China (Taiwan
Full name of <b>fourth</b> inv	rentor: Kevin Kaung Lai	
Inventor's signature:		Date:
Residence:	Milpitas, California	•
Post Office Address:	1354 Terra Alta Drive	
	Milpitas, California 95035	
	U.S.A.	Country of Citizenship: Republic of China (Taiwan)
Full name of <b>fifth</b> inven	tor: Chien-Teh Kao	
Inventor's signature:		Date:
Residence:	Sunnyvale, California	
Post Office Address:	725 Starbush Drive	
	Sunnyvale, California 94086	
	U.S.A.	Country of Citizenship: Republic of China (Taiwan)

(Declaration ends with this page)





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	[]	No suc	h applications have	been filed.						
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<b>A.</b>			CT application(s) y claims under 35		12 mos. (6 mos.	for design	) pric	or to th	is a	application,
Count	ry/PCT		Application N	<u>10</u>	Date Filed		Prio	rity Cla	ime	<u>ed</u>
								Yes [ Yes [ Yes [	j	No No No
В.		eign app	lication(s), if any, 1	filed more tha	an 12 mos. (6 mo	os for desig	gn) pr	ior to t	his	
	Country Applica Filing d	tion No:								
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			60/305,307 y 13, 2001							
			PRIO	RITY CLAIM	(35 U.S.C. §120	0)				
internati subject manner informat likelihoo issue as	onal app matter of provided tion that od that a a patent	lication(s) f each o by the f is mater reasonal t) which ng date o	t under Title 35, Us) designating the f the claims of this irst paragraph of Tall to the examinate occurred between f this application.	United States of application is application in the sapplication of this application of the sapplication of the filing data.	of America that is not disclosed in States Code, §1 lication (namely, apportant in deciding	is/are listed n that/those 12, I acknown information ing whether	d belo e prio owled on who	w and, r applicate the determinant the determi	instational interest in the second in the se	sofar as the on(s) in the to disclose s substantial oplication to
	[]		plications have bee		ows:					
				<del></del>		tatus				
	Serial N	<u>o</u> .	Filing Date	Patent	ed Pending	Abando	ned			

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P. O. Box 450A Santa Clara, CA 95052. **Todd Patterson** 

MOSER PATTERSON & SHERIDAN, LLP

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Post Office Address:	1712 Calary Drive	
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	U.S.A.	Country of Citizenship: Republic of China (Taiwan)
	(2) Ken	
Full name of fourth inv	entor Kaung Lai	
	$\mathcal{K}$	1/22/2 - X
Inventor's signature:	John Marie Committee of the Committee of	Date: 4/32/2002
Residence:	Milpitas, California	
Post Office Address:	1354 Terra Alta Drive	
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	U.S.A.	Country of Citizenship: Republic of China (Taiwan)
Full name of fifth inven	tor: Chien-Teh Kao	
Inventor's signature:		Date:
Residence:	Sunnyvale, California	
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nternat ubject nanner nforma ikelihoo ssue as	ional apposition atter of provided attention that od that as a patentional apposition and the as a patention apposition at the as a patention apposition a	olication( of each of l by the is mater reasonal t) which	it under Title 35, Us) designating the of the claims of this first paragraph of Title to the examination occurred between of this application.	United States application is it is application if it is application of this application of this application of the it is it is it is application.	of America this not disclosed States Code plication (name important in design of the control of	hat is/are listed ed in that/those, §112, I ackre ely, informati eciding whethe	ed below and se prior applications and the nowledge the on where the er to allow t	d, inso lication duty to ere is s he appl	far as the (s) in the odisclose substantial to the far and the far
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